



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,386	01/22/2004	Hideaki Funakoshi	040894-5994	3093
9629	7590	12/15/2006	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			COLEMAN, VANESSA V	
			ART UNIT	PAPER NUMBER
			2112	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/761,386

Applicant(s)

FUNAKOSHI ET AL.

Examiner

Vanessa (Brandi) Coleman

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/22/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the citizenship of each inventor.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 2112

4. Claims 1, 2, 3, 4, and 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Matsui, U.S. Patent No. 5,748,580 (hereinafter "Matsui") in view of Uekusa et al., U.S. Patent No. 6,285,517 (hereinafter "Uekusa").

For **Claim 1**, Matsui teaches:

An optical pickup (optical head; Abstract, Figs 1 & 5) including:  
a lens holder (objective lens holder; Fig 1, 18) holding a lens (objective lens; Fig 1, 22);  
a substrate secured to the lens holder (printed circuit boards; Fig 5, 19a and 19b);  
a fixing portion (stand portion; Fig 1, 17);  
three pairs of first, second and third wires, each pair being formed by two left and right wires (wire springs; Fig 5, 16a-16d and 16e-16h);  
and attaching means (col. 4, lines 35-40) ;

Matsui does not expressly disclose the first, second and third wires being of the same length and material, but the equivalence of the lengths of the wires can be determined from Figures 1 and 5, and further, it is commonly known in the art to use wires that are of the same material.

Matsui also does not expressly teach that the first, second, and third wires are soldered to the substrate at different distances from the attaching means, however, the point at which the supporting wires are soldered being aligned or unaligned as

Art Unit: 2112

necessary to mount the wires to the lens holder as clearly suggested by Uekusa in col. 7, lines 63-67 would perform equally well for its purpose in supporting the lens holder of the pickup. Hence, it would have been obvious to one of ordinary skill in the art to modify the attaching means of Matsui to have unaligned mounting points and thus different distances from the attaching means as taught by Uekusa.

For **Claim 2**, Matsui teaches:

An optical pickup (optical head, Abstract) comprising:

a lens (objective lens; Fig 1, 22);

a fixing portion (stand portion; Fig 1, 17);

at least two pairs of wires (wire springs; Fig 5; 16a-16d and 16e-16h);

and attaching means (col.4, lines 35-40);

Matsui does not expressly disclose the at least two pairs of wires being of the same length, but the equivalence of the lengths of the wires can be determined from Figures 1 and 5.

Matsui also does not expressly teach that the at least two pairs of wires are soldered to the substrate at different distances from the attaching means, however, the point at which the supporting wires are soldered being aligned or unaligned as necessary to mount the wires to the lens holder as clearly suggested by Uekusa in col. 7, lines 63-67 would perform equally well for its purpose in supporting the lens holder,

Art Unit: 2112

and thus the lens, of the pickup. Hence, it would have been obvious to one of ordinary skill in the art to modify the attaching means of Matsui to have unaligned mounting points and thus different distances from the attaching means as taught by Uekusa.

For **Claim 3**, Matsui does not expressly teach that the wires of the disclosed invention are formed of the same material, however, it is commonly known in the art to use wires that are of the same material.

For **Claim 4**, Matsui teaches:

The optical pickup (Abstract, Figs 1 and 5) according to claim 2, further including:  
a lens holder (objective lens holder; Fig 1, 18) holding the lens (objective lens; Fig 1, 22);  
and a substrate secured to the lens holder (printed circuit boards; Fig 5, 19a and 19b); wherein the wires are soldered to the substrate (Fig 1).

For **Claim 7**, Matsui teaches:

An optical pickup (Abstract, Figs 1 and 5) comprising:  
a lens (objective lens; Fig 1, 22);  
a fixing portion (stand portion; Fig 5, 17);  
at least two pairs of wires (wire springs; Fig 5; 16a-16d and 16e-16h);  
and an attaching member (col.4, lines 35-40).

Matsui does not expressly disclose the at least two pairs of wires being of the same length, but the equivalence of the lengths of the wires can be determined from Figures 1 and 5.

Matsui also does not expressly teach that the at least two pairs of wires are soldered to the substrate at different distances from the attaching means, however, the point at which the supporting wires are soldered being aligned or unaligned as necessary to mount the wires to the lens holder as clearly suggested by Uekusa in col. 7, lines 63-67 would perform equally well for its purpose in supporting the lens holder, and thus the lens, of the pickup. Hence, it would have been obvious to one of ordinary skill in the art to modify the attaching means of Matsui to have unaligned mounting points and thus different distances from the attaching means as taught by Uekusa.

***Allowable Subject Matter***

5. Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanessa (Brandi) Coleman whose telephone number is

Art Unit: 2112

(571) 272-9081. The examiner can normally be reached on Monday thru Friday 7:30-5 EST, First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayprakash Ghandi can be reached on (571) 272-9820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vanessa (Brandi) Coleman  
Art Unit 2112

VC



**JAYPRAKASH GANDHI**  
**SUPERVISORY PATENT EXAMINER**